



Sheet 1 of 10

Form PTO-1449 (Modified)

Atty. Docket No.  
27/281

Application No.  
10/577,858

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION  
(USE SEVERAL SHEETS IF NECESSARY)

Applicant:  
Shlomo Ruschin et al

Filing Date:  
28-Apr-2006

Group Art Unit:

U.S. PATENT DOCUMENTS

	EX. INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
AA	E13	2002/0048289	Apr 2002	Atanackovic et al.			
AB							
AC							
AD							
AE							
AF							
AG							
AH							
AI							

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
AJ								
AK								
AL								

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AM	E13	Alexander Torchigin and Sergey Torchigin, "One dimensional inhomogeneous photonic bandgap structures based on tapered fibers." J. Opt. A: Pure Appl. Opt. (2002) 274-282.22 (March 2002 (22.03.2002)
AN	E13	W. Both, R. Rimpler. "Effect of Homogeneous Stress and Temperature Distribution in A Laser Diode on the Pulsation" pp. 330-332. 5 NOV 1990 (05.10.1990)
AO	E13	Pierre Muret and Christopher Saby. "Band Bending, electronic affinity and density of states at several (100) surfaces of a boron-doped homoepitaxial Diamond Thin Films", p. 1-7. 30 Sept 2003

EXAMINER Eric Bida

DATE CONSIDERED 6/26/07

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	EX. INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	SUB- CLASS	FILING DATE
BA								
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BI								
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
BJ							YES	NO
BK								
BL								
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
BM	EB	Mark Csele Fundamentals of Light Sources and Lasers. Copyright 2004 John Wiley & Sons, Inc. pp. 117-158, 2004						
BN	EB	"Temperature Dependence of the Indirect Energy Gap in Crystalline Silicon" V. Alex, S.Finkbeiner, J. Weber, J. Appl. Phys. 79, p 6943 (1996)						
BO	EB	"Gaining Light From Silicon," Leigh Canham; Nature, , Vol. 408, pp 411-412 (2000)						
EXAMINER Eric Bolda				DATE CONSIDERED 6/26/07				
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	EX. INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	SUB- CLASS	FILING DATE
CA								
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
CJ								
CK								
CL								
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
CM	EB	"Infrared to Visible Up-Conversion Using GaP Light-Emitting Diodes" W. Eisfeld, U. Werling, and W. Prettl, Appl. Physics Lett. Vol 42, pp. 276-278 (9183)						
CN	EB	"Optical Absorption Coefficient of Silicon et al" ; G.E. Jellison. Kr. Lowndes. D.H. Lowndes, Appl. Phys. Lett. Vol. 47; p 594 (1982)						
CO	EB	"Gasdynamic Lasers" S.A. Losev, (Springer-Verlag Berlin, 1981)						
EXAMINER <i>Eric Bolda</i>			DATE CONSIDERED <i>6/26/07</i>					
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## U.S. PATENT DOCUMENTS

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DA							
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## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
DJ								
DK								
DL								

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

DM	CB	"Applied Physics Letter" R. Normandin, D.C. Houghton, M. Simard-Normandin, and Y. Zhang. Canadian. Journal of Phys. 66, 833 (1988)
DN	CB	L. Pavesi, Proceeding of SPIE - Vol. 4997, 206-220 (2003) ' A Review of Various Approaches to Silicon Laser"
DO	CB	Book by J.F. Ready, "Effect of High-Power Laser Radiation" (Academic Press, 1971)

EXAMINER	Eric Bolda	DATE CONSIDERED	6/26/07
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
							YES
							NO
EJ							
EK							
EL							
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
EM	CB	'Modulation of Light by Light in Silicon-on-Insulator Waveguides'; Appl. Physics Lett. Vol. 83. No 25, pp 5151-5153 (2003); S. Stepanov and S. Ruschin					
EN	CB	Book by : S.M. Sze, "Physics of Semiconductor Devices, 2 <sup>nd</sup> Ed.) (New York: Wiley 1981)					
EO	CB	Optical Gain in Material With Indirect Transitions"; T. Trupke, M.A. Green and P. Wurfel; Journal of Applied Physics Vol 93, No. 11, PP. 9058-9061 (2003)					
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FA							
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
						YES	NO
FJ							
FK							
FL							
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
FM	Ση	"Influence of pn Junction Formation et al." Physical Review B, Vol 64, 132202-1--033202-4 (2001), by B.J. Pawlak and N.Q. Vinh, T. Gregorkiewicz and K. Thonke					
FN	Ση	"Generation, Amplification and Detection of Infra and Optical et al." N.G. Basov, O.N. Krokhin and Yu M. Popv, Sov Phys. Vol 3, No. 5 JETP 13, 845 (1961)					
FO	Ση	"Stimulated Raman Scattering in Silicon Waveguides" , R. Claps, D. Dimitropoulos, B. Jalali, Electron. Lett. 38,1352 (2002)					
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GA								
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
GJ							YES	NO
GK								
GL								
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
GM	<i>E13</i>	"Coefficient Determination Related to Optical Gain et al." ; Hak-Seung Han, Se-Young Seo, Shin JH, Namkyoo Park, Appl. Phys. Lett. Vol. 81, No. 20, 3720-3722 (2002)						
GN	<i>E13</i>	"Nanosecond Laser Amplification Via Degenerate Multiwave Mixing et al." I.C. Khoo, R. Normandin, Appl. Phys. Lett Vol. 52, p. 525 (1988)						
GO	<i>E13</i>	"Photoluminescence From Gold Centre in Silicon" J. Mazzaschi , J.C. Brabant, B. Brousseau, J. Barran, J. Brousseau, F. Voillot and P. Bacuvier, Solid State Communications, Vol 39, Issue 10, pp. 1091-1092 (1981)						
EXAMINER <i>Eric Buda</i>			DATE CONSIDERED <i>6/26/07</i>					
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HA								
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HH								
HI								
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO
HJ								
HK								
HL								
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
HM	EB	"Light-Induced Radiative Recombination Centers et al.", J.I. Pankove and J.E. Berkeyheiser, Appl. Phys. Rev. B, Vol. 37(8), pp 705-706 (1980)						
HN	EB	"Radiation Damage and Defects in Semiconductors: proceedings of the International Conference Organized by the Institute of Physics, held at the Univ. of Reading (1972); Author: Whitehouse, J.E.						
HO	EB	'Dislocation -Related Photoluminescence in Silicon," R. Sauer, J. Weber, J. Stoltz. E.R. Webek, K-H Kusters, and H. Alexander, Appl. Phys. A, Vol 36, No. 1, pp. 1-13 (1985)						
EXAMINER Eric Bulda			DATE CONSIDERED 6/26/07					
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
							YES      NO
IJ							
IK							
IL							
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
IM	E19	"Silicon Temperature Measurement by Infrared Absorption et al." J.C. Strum, C.M. Reeves, IEEE Trans. On Electron Devices Vol. 39, No. 1, page 81 (1992)					
IN	E13	"Emissivity of Silicon at Elevated Temp.", P.J. Timans, J. Appl. Phys. , Vol 74 (10) , p. 6353-6364 (1993)					
IO	E11	"Electrical and Optical Properties of Gold-Doped n-type Silicon", H. Weman, A. Henry, T. Begum, B. Monemar, O.O. Awadelkarim and J.L. Lindstrom, J. Appl. Phys. Vol. 65 (1) pp. 137-145 (1989)					
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JA								
JB								
JC								
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JE								
JF								
JG								
JH								
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
JJ							YES	NO
JK								
JL								
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
JM	<i>E3</i>	Atanackovic, B. Petar, Marshall R. Larry; "Devices with Optical Gain in Silicon" See US Patent Application 2002/0048289						
JN								
JO								
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